July 31, 1923. 1,463,675

H. D. COLEMAN

CRUTCH SEAT

Filed Sept. 22, 1922

Fig. 1.

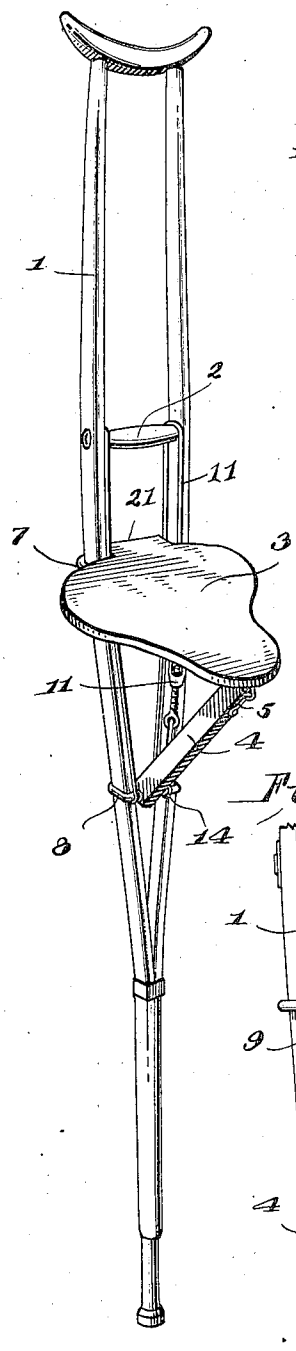



Fig. 2.

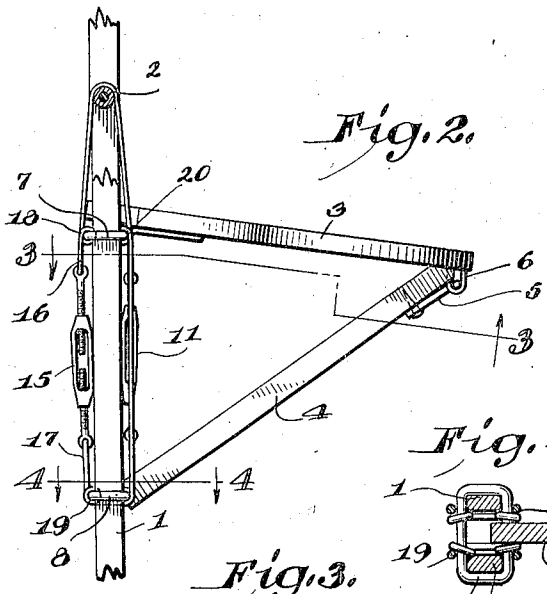



Fig. 4.




Fig. 3.

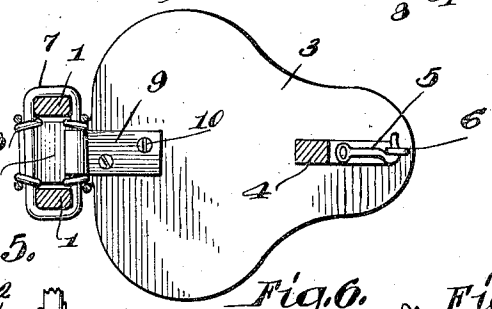



Fig. 5.

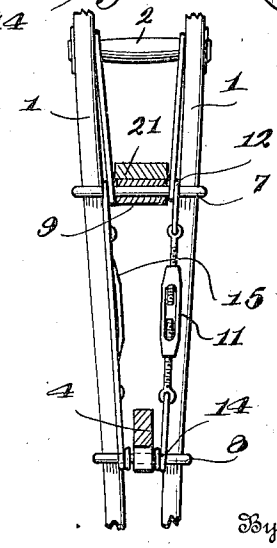



Fig. 6.

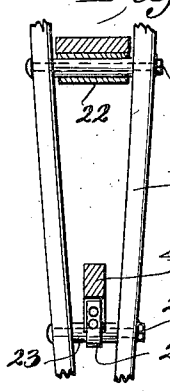
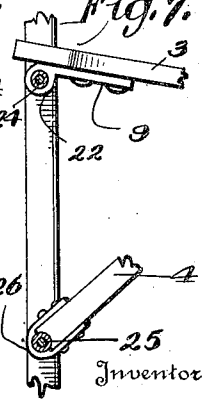



Fig. 7.




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# UNITED STATES PATENT OFFICE.

HAMILTON DUDLEY COLEMAN, OF NEAR BILOXI, MISSISSIPPI.

## CRUTCH SEAT.

Application filed September 22, 1922. Serial No. 589,842.

*To all whom it may concern:*

Be it known that I, HAMILTON DUDLEY COLEMAN, a citizen of the United States, residing near Biloxi, in the county of Harrison and State of Mississippi, have invented certain new and useful Improvements in Crutch Seats, of which the following is a specification.

The present invention relates to improvements in crutch seats in which provision is made directly upon the crutch itself for seating the user to the end that rest may be obtained at intervals on long walks.

An object of the invention is to provide a collapsible seat upon a crutch which will comprise few and simple parts, at the same time affording a sturdy support, the device being constructed for attachment to the standard crutch without requiring any alteration therein.

With the foregoing and other objects in view, the invention will be more fully described hereinafter, and will be more particularly pointed out in the claims appended hereto.

In the drawings, wherein like symbols refer to like or corresponding parts throughout the several views,

Figure 1 is a perspective view of an improved crutch with the seat thereon.

Figure 2 is an enlarged fragmentary vertical section through the crutch showing the seat.

Figure 3 is a section taken on the line 3—3 in Figure 2.

Figure 4 is similarly a section taken on the line 4—4 also in Figure 2.

Figure 5 is a fragmentary side view of the crutch with the attaching device shown thereon.

Figure 6 is a similar view showing a modified form of attachment, and

Figure 7 is a fragmentary edge view of the same.

Referring more particularly to the drawings 1 designates a standard construction of crutch in which 2 represents the hand-hold. Upon this crutch I provide the seat 3 which may be the saddle form of seat shown or other suitable design. The seat is hinged to the crutch so that it may be folded flat thereagainst when not in use and when the crutch is being employed in walking. A brace 4 is provided in conjunction with the seat 3 to hold the same in the raised position shown in Figures 1 and 2 and to avoid the likelihood of the casual collapse of the seat 3. I therefore provide a pivoted hook 5 upon the free end of the brace 4 designed to take into the eye 6 depending from the outer end of the seat. Both brace and seat form a unit and are carried by an attaching device which is formed appropriately to cooperate with portion of the crutch structure.

This attaching device may consist of two bands 7 and 8 of metal or other suitable material bent about the crutch parts and spaced below the hand-hold 2 in order to carry the seat 3 at a suitable elevation for occupancy when the crutch rests upon the ground. The upper band 7 embraces the crutch several inches below the hand-hold 2 and the adjacent portion of the seat 3 is carried by this band 7 by means of the hinge 9 which is fastened to the base of the seat as by the use of screws 10 and extends pivotally about the band. The lower band 8 pivotally receives the brace or stay 4 so that when the hook 5 is unlatched the brace and seat may be both folded down flat against the side of the crutch where they will not be in the way during walking and will not be apt to strike obstacles.

The two bands 7 and 8 are preferably reinforced and held in the positions shown by the use of some such device as by the wire shown. This wire may consist of a single strand having its ends secured in the turn buckle 11. After passing upwardly from the turn buckle the wire is wound in one or more convolutions 12 about the upper band 7 and is thence carried directly upwards parallel with the adjoining member of the crutch until the hand-hold 2 is reached. The wire is turned over the hand-hold and directed downwardly at the opposite side of the crutch being again given one or more turns 13 about the upper band 7. The wire is then carried downwardly beneath the bottom band 8 and is wound into

one or more helices 14 about one member of the band before being carried upwardly to join the lower end of the turn buckle.

In a similar way the opposite side of the crutch is provided with a turn buckle 15 connecting with the ends 16 and 17 of a wire which is wound about the upper and lower bands respectively as indicated at 18 and 19. The wire is carried from the upper band 7 above the hand-hold 2 and downwardly upon the opposite side thereof being again wound about the opposite side of the band 7 as represented at 20. From this point the wire is directed downwardly and about the lower band 8, joining with the helix 19. It will of course be understood that the two bands may be held in place by any other means. Preferably the seat 3 is provided with a reduced extension 21 which lies between the two members of the crutch 1. This extension guides the swinging movement of the seat and also avoids any lateral play in the seat and avoids it sliding off the brace 4 in either direction.

Now as shown in Figures 6 and 7, it is not necessary to have the bands 7 and 8 but the hollow cylinders 22 and 23 may equally well suffice to hold the seat 3 and the brace 4. These hollow cylinders, which may be of wood or other suitable material are carried between the members of the crutch 1 as by the use of the bolts 24 and 25. Or in other words they may be held to the crutch in the same way as the hand-hold 2, except that they are free to rotate and provide the hinging movement necessary for the seat and brace. The crutch need only be bored at the sides in order to receive the bolts 24 and 25. The seat 3 is hinged to the upper cylinder 22 by similar hinge 9 while the brace 4 may be provided with a metallic or other strap 26 extending about the lower cylinder 23.

In the use of the device, the crutch carrying the seat is intended to be placed against a wall or other support on an inclination with the foot of the crutch lying some six inches from the base of the wall. The seat 3 is lifted to a substantially horizontal position and the brace 4 brought therebeneath and hooked in place by the use of the parts 5 and 6. It will be seen in Figure 2 that the seat 3 assumes an inclined position but when the crutch is tilted in the manner just described, this will enable the seat to arrive at approximately a horizontal position. When the parts are so set up, the seat is ready for occupancy and an attendant may hold the upper end of the crutch or it may be secured in any desired manner. It will be found that the seat and the attaching structure will be adequate for all weights imposed upon it and the patient may thus combine restful periods with needed exercise.

When the walk is to be resumed, the hook 5 is detached and the weight of the parts will cause the seat and brace to drop down to a collapsed position where they rest against the crutch. If desired suitable means could be provided to hold the parts against vibration during walking. It will be understood that the seat and brace are on the outer side of the crutch during its use in walking and that the wires are on the extreme ends of the hand-hold so that no part of the device interferes in the least with the normal use of the crutch.

It will be appreciated from the foregoing that I have provided an extremely simple and inexpensive attachment for crutches which will be the source of much comfort to patients and it will permit of longer walks because of the breaking of the exercise by intervals of rest and recuperation.

It is obvious that various changes and modifications may be made in the details of construction and design of the above specifically described embodiment of this invention without departing from the spirit thereof, such changes and modifications being restricted only by the scope of the following claims:

What is claimed is:

1. A crutch, having spaced bands carried thereby, means whereby said bands are held against creeping on the crutch, a seat pivoted to the upper band, a brace pivoted to the lower band, and means for interlocking the seat and brace, substantially as described.

2. A crutch, having a hand-hold, a seat, a brace, bands surrounding the crutch and hinged to the seat and the brace respectively, and wires interlaced with said bands and with the hand-hold of the crutch, substantially as described.

3. The combination with a crutch having two substantially vertical members spaced apart throughout their upper portions, and terminating at their lower ends in a single stem, of a hand-hold secured between said members, a seat hinged to said crutch and having a rear reduced portion engaging between said vertical members below said hand-hold and serving as a guide for said seat against lateral motion when said seat is in the raised position, and a brace pivoted at its lower end between said vertical members and having its upper end engaging beneath the free end of said seat, said brace serving as a supporting leg to maintain said seat in the raised position and to support the weight of the user when seated.

4. The combination with a crutch having two substantially vertical members spaced apart throughout their upper portions, and terminating at their lower ends in a single stem, of a hand-hold secured between said members, a seat hinged to said crutch and having a rear reduced portion engaging be-

tween said vertical members below said hand-hold and serving as a guide for said seat against lateral motion when said seat is in the raised position, and a brace pivoted at its lower end between said vertical members and having its upper end engaging beneath the free end of said seat, said brace serving as a supporting leg to maintain said seat in the raised position and to support the weight of the user when seated, with means for securing the free end of said brace to said seat when said seat is in the raised position.

H. DUDLEY COLEMAN.